

SEQUENCE LISTING

<110> Olandt, Peter J.
Meyers, Rachel E.
Galvin, Katherine A.
Millennium Pharmaceuticals Inc.

<120> 33945, A Human Glycosyltransferase and
Uses Therefor

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<151> 2001-02-15

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Arg Arg Glu Pro Val Met Pro Arg Pro Pro Val Pro Ala Asn Ala Leu
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Arg Leu Gln Glu Glu Ser Val Arg Leu His Gln Ile Asn Ile Tyr Leu
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Ser Asp Arg Ile Ser Leu His Arg Arg Leu Pro Glu Arg Trp Asn Pro

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Val Tyr Ser Val Leu Glu Thr Ser Pro Asp Ile Leu Leu Glu Glu Val			
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Ile Leu Val Asp Asp Tyr Ser Asp Arg Glu His Leu Lys Glu Arg Leu			
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Lys Arg Glu Gly Leu Val Arg Ala Arg Leu Leu Gly Ala Ser Ala Ala			
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Arg Gly Asp Val Leu Thr Phe Leu Asp Cys His Cys Glu Cys His Glu			
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Gly Trp Leu Glu Pro Leu Leu Gln Arg Ile His Glu Glu Glu Ser Ala			
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Leu Gly Asn Ser Gly Glu Pro Gln Ile Gly Gly Phe Asp Trp Arg Leu			
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Ser Pro Val Asp Val Ile Arg Ser Pro Thr Met Ala Gly Gly Leu Phe			
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gct gtg agt aag aaa tat ttt gaa tat ctg ggg tct tat gat aca gga			1073
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Ser Val Arg Ala Ala Glu Val Trp Met Asp Glu Phe Lys Glu Leu Tyr
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tac cat cgc aac ccc cgt gcc cgc ttg gaa cct ttt ggg gat gtg aca 1313
Tyr His Arg Asn Pro Arg Ala Arg Leu Glu Pro Phe Gly Asp Val Thr
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Ser Gln Lys Glu Ile Arg Tyr Asn Thr His Gln Pro Glu Gly Cys Ile
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Ala Val Glu Ala Gly Met Asp Thr Leu Ile Met His Leu Cys Glu Glu
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 50          55          60
Met Pro Arg Pro Pro Val Pro Ala Asn Ala Leu Gly Ala Arg Gly Glu
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 85          90          95
Ser Val Arg Leu His Gln Ile Asn Ile Tyr Leu Ser Asp Arg Ile Ser
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115          120          125
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 405 410 415
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 485 490 495
 Arg Tyr Asn Thr His Gln Pro Glu Gly Cys Ile Ala Val Glu Ala Gly
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 Met Asp Thr Leu Ile Met His Leu Cys Glu Glu Thr Ala Pro Glu Asn
 515 520 525
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 Lys Lys Cys Val Gln Ala Ala Arg Lys Glu Ser Ser Asp Ser Phe Val
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 Leu Gly Ser Val Leu Arg Ala Gln Arg Gly Ala Gly Ala Gly Ala Ala
 35 40 45

 gag ccg gga ccc ccg cgc acc ccg cgc ccc ggg cgg cgc gag ccg gtc 192
 Glu Pro Gly Pro Pro Arg Thr Pro Arg Pro Gly Arg Arg Glu Pro Val
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gcg gtg cgg ctg cag ctg cag ggc gag gag ctg cgg ctg cag gag gag	288
Ala Val Arg Leu Gln Leu Gln Gly Glu Glu Leu Arg Leu Gln Glu Glu	
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Ser Val Arg Leu His Gln Ile Asn Ile Tyr Leu Ser Asp Arg Ile Ser	
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Leu His Arg Arg Leu Pro Glu Arg Trp Asn Pro Leu Cys Lys Glu Lys	
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Lys Tyr Asp Tyr Asp Asn Leu Pro Arg Thr Ser Val Ile Ile Ala Phe	
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Tyr Asn Glu Ala Trp Ser Thr Leu Leu Arg Thr Val Tyr Ser Val Leu	
145 150 155 160	
gag aca tcc ccg gat atc ctg cta gaa gaa gtg atc ctt gta gat gac	528
Glu Thr Ser Pro Asp Ile Leu Leu Glu Glu Val Ile Leu Val Asp Asp	
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Thr Phe Leu Asp Cys His Cys Glu Cys His Glu Gly Trp Leu Glu Pro	
225 230 235 240	
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Leu Leu Gln Arg Ile His Glu Glu Glu Ser Ala Val Val Cys Pro Val	
245 250 255	
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Ile Asp Val Ile Asp Trp Asn Thr Phe Glu Tyr Leu Gly Asn Ser Gly	
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Glu Pro Gln Ile Gly Gly Phe Asp Trp Arg Leu Val Phe Thr Trp His	
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Leu Glu Thr His Pro Cys Ser His Val Gly His Val Phe Pro Lys Gln	
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Tyr Pro Glu Leu His Val Pro Glu Asp Arg Pro Gly Phe Phe Gly Met	
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485 490 495	
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Arg Tyr Asn Thr His Gln Pro Glu Gly Cys Ile Ala Val Glu Ala Gly	
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Met Asp Thr Leu Ile Met His Leu Cys Glu Glu Thr Ala Pro Glu Asn	
515 520 525	
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 85 90 95
 Asn Asp Gly Leu Ile Gly Asn Lys Ile Leu Leu Asn Leu Val Asn Thr
 100 105 110
 Gly Leu Val Leu Asp Val Lys Gly Ser Asp Thr Gln Asn Gly Thr Lys
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<220>
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 35 40 45
 Glu Ser Asp Gly Ala Ile Arg Ile Asn Ser Asp Leu Cys Leu Thr Val
 50 55 60
 Asn Gly Thr Val Thr Leu Tyr Ser Cys Asp Gly Thr Asp Lys Gly Asn
 65 70 75 80
 Asp Asn Gln Lys Trp Glu Val Asn Lys Asp Gly Thr Ile Arg Asn Pro
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 Lys Asn Ser Lys Lys Gly Val Asp Ser Gly Leu Cys Leu Asp Val Lys
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 35 40 45
 Ile Trp Gly Gly Glu Asn Leu Glu Leu Ser Phe Arg Val Trp Gln Cys

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Val Ile Ser Arg Asn Thr Val Arg Val Ala Glu Val Trp Met Asp Asp				
	100		105	110
Tyr Lys Glu Tyr Phe Tyr Lys His Asn Pro Gln Ala Arg Lys Val Arg				
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Asp Phe Gly Asp Ile Ser Glu Arg Lys Glu Leu Arg Glu Lys Leu Gln				
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<211> 578

<212> PRT

<213> Mus musculus

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Leu Pro Asp Leu Asp Thr Arg Glu Glu Asp Leu Ser Gln Pro Leu Tyr				
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Ile Lys Pro Pro Ala Asp Ser His Ala Leu Gly Glu Trp Gly Arg Ala				
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Ser Lys Leu Gln Leu Asn Glu Gly Glu Leu Lys Gln Gln Glu Glu Leu				
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Ile Glu Arg Tyr Ala Ile Asn Ile Tyr Leu Ser Asp Arg Ile Ser Leu				
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His Arg His Ile Glu Asp Lys Arg Met Tyr Glu Cys Lys Ala Lys Lys				
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Phe His Tyr Arg Ser Leu Pro Thr Thr Ser Val Ile Ile Ala Phe Tyr				
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Phe Leu Asp Cys His Cys Glu Cys Asn Thr Gly Trp Leu Glu Pro Leu				
225	230	235	240	
Leu Glu Arg Ile Ser Arg Asp Glu Thr Ala Ile Val Cys Pro Val Ile				
	245	250	255	
Asp Thr Ile Asp Trp Asn Thr Phe Glu Phe Tyr Met Gln Thr Gly Glu				
	260	265	270	
Pro Met Ile Gly Gly Phe Asp Trp Arg Leu Thr Phe Gln Trp His Ser				
	275	280	285	
Val Pro Lys His Glu Arg Asp Arg Arg Thr Ser Arg Ile Asp Pro Ile				
290	295	300		

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 325 330 335
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 340 345 350
 Glu Ile His Pro Cys Ser His Val Gly His Val Phe Pro Lys Arg Ala
 355 360 365
 Pro Tyr Ala Arg Pro Asn Phe Leu Gln Asn Thr Ala Arg Ala Ala Glu
 370 375 380
 Val Trp Met Asp Glu Tyr Lys Glu His Phe Tyr Asn Arg Asn Pro Pro
 385 390 395 400
 Ala Arg Lys Glu Ala Tyr Gly Asp Leu Ser Glu Arg Lys Leu Leu Arg
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 420 425 430
 Ser Asn Leu His Val Pro Glu Asp Arg Pro Gly Trp His Gly Ala Ile
 435 440 445
 Arg Ser Met Gly Ile Ser Ser Glu Cys Leu Asp Tyr Asn Ala Pro Asp
 450 455 460
 Asn Asn Pro Thr Gly Ala Asn Leu Ser Leu Phe Gly Cys His Gly Gln
 465 470 475 480
 Gly Gly Asn Gln Phe Phe Glu Tyr Thr Ser Asn Lys Glu Ile Arg Phe
 485 490 495
 Asn Ser Val Thr Glu Leu Cys Ala Glu Val Pro Gln Gln Lys Asp Tyr
 500 505 510
 Val Gly Met Gln Asn Cys Pro Lys Asp Gly Leu Pro Val Pro Val Asn
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 Ile Ile Trp His Phe Lys Glu Asp Gly Thr Ile Phe His Pro His Thr
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Glu Lys

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